**Chapter One: Introduction**

The design and implementation of an online recruitment system for youth graduates aims to create a platform that facilitates the process of connecting employers with talented young professionals

Seeking employment opportunities. This project will provide a streamlined and efficient system for job posting, candidate application, resume screening, and interview scheduling. The ultimate goal is to bridge the gap between employers and fresh graduates, making the recruitment process more accessible and convenient for both parties the purpose of this report is to expand the research on the recruitment methods by evaluating the effective sources based on measures used to define and examine hiring criteria with focusing on the e-recruitment system. This chapter will discuss the current methods used in Gao Tek Inc. by identifying the problems and gaps in the system.

This will be followed by a problem statement, significance of study, and purpose.

In the recent years the human resources management has highlighted the importance of their practices for the organization through the media by increasing the number of published researches,

In both magazines and scholarly and practitioner-focused journals. (Barber, 1998). What forms the foundation of a company is the human capital that is generated by the human resources

Department by recruiting stuff. The success in the human resource efforts mostly leads to a

Future success for the company, in which the recruitment process helps to identify and attract new high-quality employees (Barber, 1998).

The essential focus of this report is to evaluate the Internet efficiency as a recruitment source. In the middle of 1990s, the Internet started to be accepted by recruiters, especially by the applicants for recruiting information technology (Hays, 1999). However, the effectiveness of the Internet has been examined by a wide range of researches to prove its effectiveness in the recruitment process. The data shows that Internet efficiency has less exploration than expected comparing to its role as a

Recruitment source. There is a huge number of literatures about Internet recruiting has provides positive and negative effect on organizations, to support these assumptions, this section will discuss them. According to the general literature the e-recruitment has benefits for both recruiters and applicants in several angels such as speed, cost efficiency, ease of use, and geographic reach. On the

Other hand, the main drawbacks are, lack in executive talents and declaration in fresh student’s potentials. (Raymond L. Hoger, 1998).

Recruitment is important for organizations since it performs the essential function of drawing an important resource into the organization. It has a strategic aim as it focuses on the need to attract high quality people in order to gain a competitive advantage. A new development in this domain ***Copyright © 2016 The Authors.*** This is an open-access article distributed under the terms of the ***Creative Commons Attribution License 4.0****,* which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

**Problem Description**

The key of successful in any company is excellence and highly committed candidates. Such employees who responsible of each decision making, each work done, and each result are the reason for the success of organization’s future. However, Effective and accurate E-recruitment System allows the company to reach the higher level of the company’s expectations and outcomes through

Implementing human resources strategies, policies, and practices. It allows human resources

Department to have conscious and direct support of the web-based technology channels (S.L). The e-recruitment system is a major source for the recruiters in the human resources department to fulfill

The needs and vacancies in the company with the required candidates. The traditional method of recruitment depends on non-technology sources such as, word of mouth, flyers, and advertisement to facilitate reaching the organization which known as “searching candidates”. Another source is

Paper-based test “screening” used in creating organized applicant’s pool. Also, using “interviews”

By interfere with candidates face-to-face in order to contact qualified candidates. One of the sources is “placement” which is a traditional recruitment method through phone calls, setting up meeting,

And shaking hands (S.L). However, the traditional manual recruitment system in Gao Tek Inc. is complicated and tends to contain lot of loop holes. It is a long and exhausting process for human

Resources department and applicants because it includes a huge amount of data.

These data are redundant because of the missing features in the current system. The redundancy will lead to lack of consistency in the data which makes it hard to human resources recruiters to maintain all the information form the applicant’s application. In order to analyze and organize applications of different jobs, the department will need to hire more employees which tends to be waste of resources.

**Problem Statement**

“The lack of effective and accurate e-recruitment system will impact negatively on the human resources department efficiency” A manual traditional recruitment system is no longer effective and accurate process to hire applicants or to fulfill vacancies within the company. This system is impacting negatively on the performance of human resources department. The traditional process

Of hiring and selecting is having several gabs and errors which is waste of resources, efforts, and time consuming. The solution for these problems is to replace the manual recruitment system with an e-recruitment system. Technology nowadays is playing a huge role of effective and fast sauce for professional recruiters. The E-Recruitment is also known as online recruitment; it is a web-based resource that allows human resource department to enlarge talent pool which leads to obtain a data-base of talented candidates to facilitate the process of selecting and hiring the applicants which carried out by the organization (Emma Parry, 2014).

Moreover, the E-recruitment system is mainly interface with the activities of the department of human resources. The developed e-recruitment system has specific criteria to determine the exact

Employee’s specifications toward certain job. The online system facilitates the activities of human resources department, it provides to candidates the chance to apply for more than one available job that matches their own skills. It also provides some online tests for applicants in order to reduce time and resources for recruiters. In addition, it helps candidates to understand the company polices, jobs tasks, jobs responsibilities.

Furthermore, the Human Resources Function should conduct four main pressures which are strategic, flexible, efficient, and customer-oriented (David P. Lepak, 2013). There are several of authors who assumed that technology is the key element of achieving these goals (Mark L. Lengnick-Hall, 2013). The absence of effective and accurate e-recruitment will impact negatively on the human resources department which will neglect the success of the organization (Singh Parbudyal, 2012).

**Significance of the Study**

Human Resources department plays a critical role in the company success. Hiring the right person for the right job will lead into achieving the company’s goals effectively. However, the manual recruitment system in the company is no longer an accurate method for hiring and selecting employees. Employees are facing difficulties with finding qualified candidates that fits the jobs and filter applications manually despite the time consuming and cost. Therefore, replacing the manual recruitment system with an e-recruitment system in the company has effect on the Human Resources department’s performance.

Recruiting online helps the Human Resources Department to narrow the research with accurate

Information in short time. It stops random applications from flooding into the department. Also, it facilitates reaching huge number of job seekers that matches the vacant jobs within the company. In addition, e-recruitment allows the department to post advertisings contains all the information of qualifications needed in the job to find candidates that want to be found and hired. Posting an ad is very helpful and easy for the department with much lower cost.

**Problem Solution:**

The existing system should be replaced with a totally automated **“online recruitment system for youth graduates”** which enables easy and flexible manipulations of various activities. The first step of system analysis involves the identification of need. The lists of requirements that are identified are:

* Registered graduates should be eligible to apply for one or many available jobs only if the given job requirements match with their skill sets.
* Unregistered graduates cannot interactive and user friendly site is required for all, graduates employers and administrator.
* New graduates cannot access the system functionality until they are registered.
* From each department administrator assigns a single employee as an employer.
* The employer is responsible to post the job requirements along with the selected student information after the complete recruitment process.
* The administrator is the mediator between the graduate and the employer.
* Normalized database should be maintained which yields in consistent results.
* Generating reports at regular intervals which are helpful in decision making.

**OBJECTIVES OF THE STUDY**

The practical objective of this work is to design and implement an online recruitment system for youth graduates. One of the most important objectives of this project is to contribute to academic research work while the subsidiary objectives include;

1. Develop a user-friendly and intuitive web-based interface for employers to post job vacancies, requirements, and manage applications.
2. Enable candidates to create personalized profiles, upload resumes, and search for job opportunities that match their skills and interests.
3. Implement an automated resume screening process to filter and rank candidates based on job requirements, educational qualifications, and relevant experience.
4. Provide a secure and confidential messaging system for employers and candidates to communicate and schedule interviews.
5. Incorporate analytics and reporting features to generate insights about job vacancies, candidate demographics, and hiring trends.

**SCOPE OF THE STUDY**

1. This project will go as far as deploying web technologies in the implementation.
2. Dreamweaver will be used as the major development tool. Database connection using MySQL will extensively be covered in this work.
3. Studies were carried out in the various institutions that conduct interviews and recruitments. The scheme used is closed tag to the information collected at the point of this research. All forms and database designed followed the pattern of the manual means by the employers of labour.
4. This project was deployed using a local sever, which runs on a standalone Pc and not deployable to the internet.

**LIMITATION OF THE STUDY**

1. The study was limited by several factors, of which some posed serious constraints towards the development of the project. One of the major drawbacks was due to financial incapacitation. This is among other frustrations such as program failures during modular construction stages.
2. In ability to procure personal internet access for uploading made it difficult for the deployment at testing stag.
3. Again was the distance and availability of research materials. It was absolutely difficult to source most of the important information needed for this work. For instance, collection of information that helped me to develop the forms and database was another serous issue.

**Features:**

1. **Employer Portal:**

Job posting with detailed descriptions and requirements.

Application management and candidate shortlisting.

Real-time notification system for new applications and messages.

Analytics dashboard to track performance and hiring metrics.

1. **Candidate Portal:**

Personalized profile creation and resume upload.

Job search functionality with advanced filtering options.

Application tracking and status updates.

Messaging system to communicate with employers.

1. **Resume Screening**:

Automatic parsing and extraction of relevant details from uploaded resumes.

Algorithm-based ranking of candidates based on job requirements and qualifications.

Integration of machine learning techniques to continuously improve match accuracy.

1. **Interview Scheduling:**

Calendar integration for seamless interview scheduling.

Real-time availability visibility for employers and candidates.

Automated reminders and notifications for upcoming interviews.

**DEFINITION OF TERMS / VARIABLES**

1. **RECRUITMENT:** This refers to the process of attracting, screening and selecting qualified people for a job at an organization or firm.
2. **WEB:** This refers to a vehicle for accessing and sharing of information.
3. **SERVER:** A computer or program managing access to a resource or service in a network.
4. **PORTAL:** A web application that is designed to represent a ton of information in a concise and cantered way thereby making the internet easier to use eg. Yahoo.com, Netscape.com, etc.
5. **ONTOLOGY:** Ontology in computer science and information technology is a formal representation of the knowledge by a set of concepts within a domain and the relationship between those concepts.
6. **METADATA:** This is loosely defined as data about data. It is a concept that applies mainly to electronically archived data and is used to describe the definition, structure and administration of data file with all contents in context to ease the use of the captured and archived data for further use.
7. **SQL:** Structured Query Language is a database computer language designed for managing data in relational database management system (RDBMS) and originally based upon relational algebra. It scope include data query and update, schema creation and modification, and data access control.
8. **DATABASE:** This is designed to offer an organized mechanism for storing, managing and retrieving information.

**Chapter Two (Literature Review)**

The human resources management effectiveness has been an important factor to both scholar and

Practitioners by pointing it as a of key success for the overall business. The recruitment is one function of the human resources management; it is the main method that provides superior human capital to the organization. There are several definitions of the recruitment process one of them is “those practices and activities carried on by the organization with the primary purpose of identifying

And attracting potential employees” by (Barber, 1998). The recruitment is the most important element in the human resources process required by the organization which is finding Qualified and

Committed employees that meets the position needed and minimizing the process Cost for the organization. However, recruitment can be in several ways such as organizations Website, recruitment agencies, and manual resumes of applicants. In general, organizations find the best and accurate way Is to hire from its own websites, in order to seek applicants who are willing to achieve jobs in the organization. The recruitment process is affecting on the individuals as same as on the business process in the Organization. Recruitment is a process that influencing on achieving the objectives of hiring the Right individuals that seeking a job to the right job’s vacancies. In addition, work is a hug matter for people’s lives, job choice can subsequently impact on the individual’s wellbeing (Barber, 1998). Nowadays, job seekers are more aware of the ways organizations recruit, they should either handle or post their resumes to the organization’s websites or offices instead of recruitment agencies. They will gain more chances and opportunities to find a job. The recruitment process is providing knowledge and information about the organization diversity, workforce, and job vacant to those who are seeking for a job in the organization (Tauten, 2001).

**E-recruitment Effectiveness on Human Resources Department**

Recruitment is the key factor in the Human Resources Department for the overall success of the

Organization business. Human Resources Department requires a superior recruitment for obtaining

Qualified employees that fulfil vacancies in the organization in order to gain competitive advantage. However, organizations are focusing on providing e-recruitment for the Human Resources

Department which approves its advantages by many numbers of studies (Jain, 2014).

The article of (Jain, 2014) has emphasized on the advantages of e-recruitment in recruiting, hiring, and selecting. It increases the overall effectiveness, hiring profitable employees, and working capabilities of the Human Resources Department’s activities. On the other hand, the author found that e-recruitment has proved it effectiveness in reducing cost from the Human Resources Department’s budget. Furthermore, line managers are involved in the recruitment process because it is a long process that requires several hours of paper work and huge number of documentations.

The e-recruitment has eliminated time-consuming into minutes through clicks. As a result, managers can work effectively on the strategic matters and the Human Resources Department issues can be handled by the HR managers. The article of (Anjali Gupta, 2012) shows in-depth the mechanism of the e-recruitment effectiveness for the Human Resources Department. The e-recruitment facilitate for the Human Resources Department in implementing human resources strategies, policies, and practices. It cooperates with human resources goals for the organization by web technology based channels. The e-recruitment provides a portal that contains the needed information for managers, recruiters, and Employees in order to re-view and extract applicant’s forms and information. Moreover, the Human Resources Department can develop the talent pool with professional and talented applicants with online recruitment which allows enlarging the human capital with qualified employees in the Organization. To acknowledge, the e-recruitment has impact positively on the Human Resources Department activities such as implementing strategies, policies, and practices. However, the E-recruitment has a major factor in developing and improving the Human Resources System.

**E-recruitment Effectiveness on Human Resources Employers**

The e-recruitment is not only impacting on the Human Resources Department activities, but also

Impacting on the HR Specialist and HR managers. There are several studies pointing the advantages of the e-recruitment on the recruiter’s decision making for applicants and creating a “strong communication system” with applicants (Maxim Victor Wolf, 2015).

This section will discuss some of the studies that present the e-recruitment effectiveness on human resources employers. The research of (Marr, 2007) stated that recruiters are a major component in recruitment process, recruiter’s knowledge and information on vacant job can reflect on making

Judgmental decisions about applicant. The e-recruitment provides to recruiter’s specific information and qualifications required in candidates. Based on that, the recruiter’s performance has improved during hiring and selecting process. However, the study of (Ha, 2011) discussed in detailed that e-recruitment system increases the efficiency and consistency of the recruitment process, at the same time it reduces efforts and resources to find qualified applicants. Recruiters now can easily find talented applicants who desire a job in the organization. The e-recruitment provides for recruiters a full picture of the applicant’s background through reviewing their resumes without making direct communication. Over time, recruiters will gain more experience in making judgmental decision on selecting applicants for the right vacancy. Author (Maxim Victor Wolf, 2015) has explained in his book that, the relation between recruiters and candidates is the key of success in hiring candidates. The e-recruitment allows recruiters to reach candidates to collect data and provide information about the job vacant. He emphasized on building a “strong communication system” for several reasons. One of the reasons is, to clear and provide information about the diversity of the organization and the nature of the job vacant. Another reason is, communication between recruiters and candidates can protect the organization’s reputation from false accusation if candidates misunderstood recruiter’s communication. Moreover, communication between candidates and recruiters through e-recruitment can be saved automatically which recruiters can be reviewed and evaluated by HR managers.

**E-recruitment Effectiveness on Applicants**

**The induction timetable**

From the journal of vocational and technical education vol 12, induction often begins before the person has actually started, in that the organization will supply material as part of an initial 'information pack', or with the invitation to interview, or with the letter of job offer. This may be particularly important in jobs of a technical nature, where it is helpful for the new starter to be as well informed as possible about that side of the work. Clearly, learning the particular projects and initiatives will have to be done in the workplace but much 'mental preparedness' can be undertaken in advance. The Company Handbook, and the Written Statement of Employment Particulars, can also provide essential information about the organization and the job.

According to Kelly D, (2001), a good reception, with the line or personnel manager spending time with the new employee, is important on the first day. There may be further documentation to complete, perhaps a preliminary discussion about training either immediately or in the future, an explanation of the development opportunities that are available, and of course enough information to give the new starter a good grasp of the working practices of the organization.

According to Elwood F, etal (1996), any particular health and safety requirements should be made known, together with details of whom to go to for help and advice during the course of their employment. Many companies use a 'buddy' system, where an experienced worker is nominated to assist the new recruit in all the day-to-day questions that may arise.

According to McDonald I, (1995), it is useful to have a written checklist of the items that need to be covered in the induction programme; Not only does this give some structure to the induction but it also ensures that both the new starter and the manager know what has or has not been covered at any given time. Such a checklist is normally drawn up by the personnel section in consultation with other involved staff, such as safety officers, line manager/supervisors, employee representatives (if appropriate), and training officers.

Kelly D, (2001), said that the induction programme may be spread over several days or weeks, and may incorporate specific job training, but the following points should be borne in mind:

* All employees need to be able to work in a safe and healthy manner. Recruitment and placement procedures should ensure that employees (including managers) have the necessary physical and mental abilities to do their jobs, or can acquire them through training and experience. Employers should have systems in place to identify health and safety training needs arising from recruitment.
* People can take in only so much information at any given time, and should not be overloaded. It is important that health and safety is introduced in a structured way.

If there are special health and safety requirements, make sure the new starter fully understands their importance - otherwise there is the risk of being exposed to unnecessary danger or endangering their co-workers. All employees must know what to do in the event of a fire or other emergency. Omenyi A. S, (1997), added that the following which should be considered during induction:

Setting out the plan of induction at the beginning avoids the problems that can arise in trying to arrange time in the future, when the employee is established in the job. Odiagba E, (2004), also added that the following should not be forgotten;

* Don’t forget induction needs for shift workers or night workers. They may need some time on days, or modified shifts, to cover the induction period
* Even if the induction period covers job training, try to let new starters do some practical work, as this will assist their learning and enable them to relate what they are being taught to what they will be doing. Popoola S.O, (2000), said that the outcome of induction timetable is that the new starter should have a good feel for the organization, and should continue to feel that they made the right decision in joining the firm.

**The induction process**

According to Nadler Ed, (1984), induction need not be a very formal process but it needs to be properly managed. In many organizations it will be carried out informally by the new starter's manager or supervisor on a day-to-day basis. Nevertheless, having a structured checklist to follow is useful for both parties. Most induction will consist of meeting and talking with new colleagues, watching activities and asking questions. It may be appropriate to provide certain information in written form; and if the organization has a company handbook, this can often act as an aide memoire covering important aspects of the company organization and how it functions.

From journal of vocational and technical education vol 12, if a group of new employees is recruited at the same time, it may make sense to hold group induction sessions on the common topics to be covered - discussion, videos, slide presentations can all add to the effectiveness of the programme.

McDonald I, (1995), said that even the people transferring from one part of the organization to another need induction into their new area. Don't assume that they will know the relevant people or the skills they will need in the new job. However, they may need a more individually tailored induction programme to meet their particular needs.

Determining the e-recruitment effectiveness through assessing applicant’s perceptions. E-recruitment has a huge influence on applicant’s decisions to purse a job. Nowadays, the aware of web portals and recruitment websites has increased and become more important for recruiters and applicants. However, e-recruitment allows applicants to find-out better opportunities and jobs that suit them. Indeed, one study (Ritzy Karina Brahmana, 2013) shows the importance of e-recruitment on applicant perspective. Ritzy and Rayenda focused on the major elements that effect on applicant’s point of view. E-recruitment helps applicants to narrow the information about jobs in order to find the suitable job that matches their expectations. In addition, the existence of erecruitment allows applicants to do no longer interface with recruiter physically instead they can upload resumes or apply for jobs through organization’s websites. Erecruitment can provide information about the job vacancies in the organization and each job’s job description, where applicants can make effective decision in applying for the job. Thus, e-recruitment facilitates for applicants their own judgmental decisions about the organization’s environment and job’s nature which leads into enhancing commitment and reduce employee’s turnover. Many applicants according to the authors are benefited from the e-recruitment through opining their job choices. Managers and executives who are not searching or looking for new opportunities often, with the e-recruitment recruiters can easily reach such professional applicants. However, organizations are acquiring talented applicants from different countries which reflect on applicants positively by providing good jobs opportunities. Applicants’ belief in enhancing the job search effectiveness, this will lead into changing in the applicant’s attitudes toward the job-search websites. On the

Other hand, e-recruitment save automatically the applicants resumes in a database which will make

Recruiters more probably re-contact with candidates. To acknowledge, e-recruitment has a huge impact on applicant’s knowledge, job opportunities, and better decision making. It reduces high turnover and enhance commitment in the employees. E-recruitment provides also superior opportunities for both organizations and managers.

**HOW PORTAL FUNCTIONS AND COMPONENTS**

A portal is not a single technology, but it brings together a wild range of technologies and enables them to work together for the benefit of the individual. To present users with information and services that are appropriate at any particular time, portals need to be modular and dynamic. At best, organizations can guess appropriate structures and features for various constituents and then leave it up to each individual to “personalize” his/her portal.

In order to achieve that goal a portal has to provide, Maedche A, and etal (2002) gave the following components which helps the portal function effectively via;

**2.6.1 Channels**

These are the portals’ building blocks. They are modules that link to or contain snippets of information or services. Users should be given a library of channels from which they can choose an not to defeat their own interest, though organizations will make certain channels mandatory. Different constituent groups or roles will have different default selection of channels with the understanding that many channels are universal (eg mail, calendar, weather) and will be available to aa groups.

**2.6.2 Directory Services**

In order to customize the information for the entering individual, the organization needs to know whom the visiting person is. What role does he/she represent vis-à-vis the organization and what are his/her preferences and requirements? The more an organization knows about the portal visitor the better it is positioned to present a portal that best meet the individuals need. Individual information is maintained in the organization directory that also facilitates the sign-on and the person’s authentication.

**2.6.3 Roles**

As a starting point, organizations will need to develop default portals for different types of customers such as students, faculty, staff, alumni, parents, future students. These default portals contains information and services that organization deem to be most attractive to each customer group or role. In addition to providing different channels, the portal design may differ for different roles. Eg students prefer other layouts and graphics compared to alumni. Roles determine how the portal looks for different audiences. Information about which role a person has, is stored in the organization directory.

**2.6.4 Customization Backend Integration**

In addition to linking to the organization’s directory, portals become even more powerful where they can draw on the wealth of information and logic stored in the organization’s ERP system. Through the logic and data embedded in the ERP system, it does not only know who is entering the portal but also what that person has to do or can do. The organization’s ERP system has accumulated in it’s database valuable information and the ERP system itself contains the logic on how that information should be acted upon. This can be used to deliver information at appropriate intervals or when critical content change.

2.5 Conclusion

This chapter discusses the recruitment as a key of success in the whole process of hiring in the Human Resources Department. It has several functions for maintaining a superior outcome and providing effective human capital for the organization. The online recruitment is necessary tool for the recruitment process. It has several forms such as web-sites, recruitment agency, and web-portals. However, the e-recruitment effectiveness has been proved by many studies on the Human Resources Department, Human Resources Managers, HR specialist and applicant. E-recruitment has many advantages on the Human Resources Department’s activates such as the policies, regulations, and implementing strategic plans. This will lead into a major development in the Human Resources Department’s activities, performance and outcomes. Also, effective online recruitment will reduce the budget of the Human Resources Department. On the other hand, online recruitment has shown its effectiveness on the HR specialist, recruiter, and executive manager’s decision making and effective judgment on applicants. It opens for them new ways and build strong communication between them and recruiters in order to understand and collect more accurate data which helps on hiring the right employee for the right decision. Moreover, e-recruitment has effect positively on applicants own judgment for applying the job through knowing the nature of available jobs and the organizations environment.

**Chapter Three: SYSTEM ANALYSIS AND DESIGN**

Introduction and Overview

Chapter Three presents the purpose of research and strategy of implementing E-recruitment

System in Gao Tek Inc. which measures the e-recruitment system outcomes that improve the organization performance. Also, assess the impact of the E-recruitment System on the Human Resources Department’s employees, by measuring the level of satisfaction of using the system. The research design and source of data will be present in detail, followed by the analysis and result of the study. The most creative and challenging face of the system development is System Design. It

the understanding and procedural details necessary for the logical and physical stages of development. In designing a new system, the system analyst must have a clear development.

understanding of the objectives, which the design is aiming to fulfill. The first step is to determine how the output is to be produced and in what format. Second, input data and master files have to be designed to meet the requirements of the proposed output. The operational phases are handled through program construction and testing. The developed e-recruitment system aims to reduce reduction in time spent on provider and reduction in recruitment processing times. There are six key stages involve in e-recruitment process.

3.**2 Research Purpose and Strategy**

The research purpose is to examine the extent of the e-recruitment system in the company and its impact on the human resources department efficiency. The study will address the acceptance of the e-recruitment system on the human resources department employees, examine their attitudes toward the system, and in which extent they receive the effectiveness and efficiency of the e-recruitment system.

**3.1.1 Sources of data**

I gathered the material through both primary and secondary sources.

The primary data are fresh materials that are realized either through interviews or questionnaire or both, but the one used in this research work is realized through interview.

The major source of data used in this work is the secondary source which represents works already done in the research topic and include the following information form;

* Textbooks
* Computer journals
* Magazines
* Articles
* Library and
* Internet.

**Data Analysis**

**Research Question 1:** Which recruitment source does your organization mostly use? The question addresses the recruitment sources used in Gao Tek Inc. in order to gain information about the organization system.

* **Question Answers and Analysis.**

Amie Singh & Anjali sahji stated, they mostly use web portals for recruiting new applicants.

They stated that most commonly used in hiring process is web portals. Web Portals such as LinkedIn and Naukri.Com are online recruitment tools that provide for companies several features for attracting and hiring candidates, which facilitates the recruitment process, minimize the cost and time. Creating web portal or website for the company is important to develop Human Resources Department activities such as hiring and selecting

**Research Question 2:** Which Internet tools you used to hire candidates?

The question attracts which web portal is mostly used by the company and what are the specific tool’s advantages.

* **Question Answer and Analysis**

TL and employees/Interns agreed on “LinkedIn” is the most successful tool in the hiring process. “LinkedIn is a social network specifically designed for career and business

professionals to connect. As of 2020, over 722 million professionals use LinkedIn to cultivate their careers and businesses.

**Create and Submit Approved Recruitment Requisition**

The university creates an online requisition by logging onto the e-recruitment system and adding a new requisition. One needs to log on by entering the given URL address into your web browser. The given link will enable the applicant to complete all mandatory fields and any optional fields which may apply. If there is any challenges on how to complete any part then there is need to consult the directorate for help or contact the central HR Service Centre.

**3.3 Advertise Job**

The central HR Service Centre will post all job adverts from the information provided on the requisition. They will automatically be informed of an approved requisition online, confirm with HR Managers the job evaluation, and post the advert out to the relevant sites according to the closing dates specified on the requisition.

In the sequence of the apply for available jobs the graduate has to give his entire details in the grad options page and he has to mount the database in the apply servlet and set the query in the emp requirement table. There he can insert the values processing of the database will be done and the result will be displayed to grad details page



**3.4 Shortlist Candidates**

This stage involve where job can be advertise .Once the job is advertised you are able to review candidate applications online. Candidates will have been requested to submit a CV and a Supporting Statement. one can view candidate applications individually as they are received or in one batch following the respective closing date. Redeployee candidates can submit applications through their own application gateway. Recruiters will be able to view redeployee profiles online on this gateway and shortlist. To shortlist you can send applications to other shortlisters to review. You can also send a spreadsheet to shortlisters and ask them to complete this with their results for ease of recording decisions. Unsuccessful applicants at this stage will receive an automatically-generated email from the system, two days after their status has been changed to unsuccessful preinterview. You can, of course, also send more personalized rejection letters. Successful candidates will be indicated as such on the system on candidate status and these will be then taken forward for interview.

**3.5 Interview / Reject Candidates**

Once you have selected your shortlisted candidates, interviews can now be set up for the lucky applicant.



*If the time set by the administrator and the time set the internet server becomes same then the deployment of the question paper will be done this will be done in the main server. Then from here it will be transformed to all the clients (i.e. all the systems.)*



*Check status is used by the graduate to see his status whether he is selected or not.*

*It is also used by the employer to see whether he is eligible for the post.*

*It is used by the administrator to change the status of both the graduate and the administrator.*

**3.6 Appoint Candidate**

Once you have selected a preferred candidate to appoint you should change that candidate’s status online to Recommendation to Offer. This will open up the Appointment Form, which will be auto-populated from the requisition where possible. Once you determined the draft offer details you should contact the candidate and make a verbal offer. Once those discussions have been completed and you believe the offer can now be formally made you can proceed to appoint. At this point you should complete and submit the Appointment Form and any reference requests, for non-academic jobs. The performance of the developed system was evaluated by consulting three university staff and relevant information was collated through personal interviews and questionnaires was administered to the staff of those university, Human Resource Departments and other relevant professionals of these university.

***Input Design***

In the input design, user-originated inputs are converted into a computer-based system format. It also includes determining the record media, method of input, speed of capture and entry on to the screen. Online data entry accepts commands and data through a keyboard. The major approach to input design is the menu and the prompt design. In each alternative, the user’s options are predefined. The data flow diagram indicates logical data flow, data stores, source and destination. Input data are collected and organized into a group of similar data once identified input media are selected for processing. In this software, importance is given to develop Graphical User Interface (GUI), which is an important factor in developing efficient and user friendly software. For inputting user data, attractive forms are designed. User can also select the desired options from the menu, which provides all possible facilities. Also the important input format is designed in such a way that accidental errors are avoided. The user has to input only just the minimum data required, which also helps in avoiding

The errors that the users may make. Accurate designing of the input format is very important in developing efficient software. The goal of input design is to make entry as easy, logical and free from errors.

***3.3 Output Design***

In the output design, the emphasis is on producing a hard copy of the information requested or displaying the output on the CRT screen in a predetermined format. Two of the most output media today are printers and the screen. Most users now access their reports from either a hard copy or screen display. Computer’s output is the most important and direct source of information to the user, efficient, logical, output design should improve the systems relations with the user and help in decision-making. As the outputs are the most important source of information to the user, better design should improve the systems relations and also should help in decision-making. The output device’s capability, print quality, response time requirements etc should also be considered, form design elaborates the way the output is presented and layout available for capturing information. It’s very helpful to produce the clear, accurate and speedy information for end users.

***Logical Design***

Logical data design is about the logically implied data. Each and every data in the form can be designed in such a manner to understand the meaning. Logical data designing should give a clear understanding & idea about the related data used to construct a form.

***3.4 Data Flow Diagram***

A Data Flow Diagram (DFD) is a diagram that describes the flow of data and the processes that change or transform data throughout a system. It’s a structured analysis and design tool that can be used for flowcharting in place of, or in association with, information oriented and process oriented system flowcharts. When analysts prepare the Data Flow Diagram, they specify the user needs at a level of detail that virtually determines the information flow into and out of the system and the required data resources. This network is constructed by using a set of symbols that do not imply a physical implementation. The Data Flow Diagram reviews the current physical system, prepares input and output specification, specifies the implementation plan etc.

***3.4.2 Steps to Construct Data Flow Diagrams***

Four steps are commonly used to construct a DFD

1. Process should be named and numbered for easy reference. Each name should be representative of the process.
2. The direction of flow is from top to bottom and from left to right.
3. When a process is exploded into lower level details they are numbered.
4. The names of data stores, sources and destinations are written in capital letters.

***3.4.3 Rules for constructing a Data Flow Diagram***

* Arrows should not cross each other.
* Squares, Circles and files must bear names.
* Decomposed data flow squares and circles can have same names.
* Choose meaningful names for dataflow.
* Draw all data flows around the outside of the diagram

**Feasibility study:**

Whenever we design a new system, normally the management will ask for a feasibility report of the new system. The management wants to know the technicalities and cost involved in creation of new system.

* Technical feasibility
* Economic feasibility
* Physical feasibility

**Technical feasibility:**

Technical feasibility involves study to establish the technical capability of the system being created to accomplish all requirements to the user. The system should be capable of handling the proposed volume of data and provide users and operating environment to increase their efficiency.

For example, system should be capable of handling the proposed volume of data and provide users.

**Economic feasibility:**

Economic feasibility involves study to establish the cost benefit analysis. Money spent on the system must be recorded in the form of benefit from the system. The benefits are of two types:

Tangible benefits:

* Saving man labor to do tedious tasks saves time.

Intangible benefits:

* Improves the quality of organization.

**Physical feasibility:**

It involves study to establish the time responses of the new system being created. For e.g., if the new system takes more than one day to prepare crucial finance statement for the management, wherever it was required in an hour, the system fails to provide the same.

It should be clearly establish that the new system requirements in the form of time responses would be completely met with. It may call for sincrease in cost. If the required cost is sacrificed then the purpose of the new system may not be achieved even if it was found to be technically feasible.

**ANALYSIS OF THE EXISTING SYSTEM**

In the existing system a vacancy arises. Sometimes this is due to the creation of a new job, on other occasions it may be because an existing member of staff has been promoted or is retiring. The job description is updated and an employee specification is written. The job description lists the duties of the job whilst the employee specification gives details of the experience, skills and abilities needed to carry out the job. A vacancy advertisement is written and is circulated via different media including newspapers, internet recruitment sites, specialist publications and the Employment Service. Application forms are sent out along with copies of the job description and employee specification and must be returned on or before the closing date that has been set. A shortlist is compiled of applicants who are going to be invited to attend for interview. This is done by the recruitment panel who compare each application form with the requirements of the employee specification. Feedback can be provided (upon request) to those not shortlisted and applicants have the right to complain if they feel they have been unfairly treated. Interviews are held. The panel will use the same set of questions with each interviewee. The interview may include a selection test. Feedback can be provided (upon request) and unsuccessful applicants have the right to complain if they feel they have been unfairly treated. The successful candidate are the invited for orientation, which is closely followed by induction training, after which the successful candidates are now absorbed into the force and deployed accordingly.

**3.3 ADVANTAGES AND DISADVANTAGES OF THE EXISTING SYSTEM**

**3.3.1 Advantages of the existing system**

The existing system has the following as advantages:

1. It ensures that the right candidates are selected the available position.

2. The system gives all the applicants’ equal opportunity to be tested fit for the available position

3. The system has the potentials of encouraging professionalism

4. It paves the way for due process.

**3.3.2 Disadvantages of the existing system**

The following are the disadvantages of the existing system;

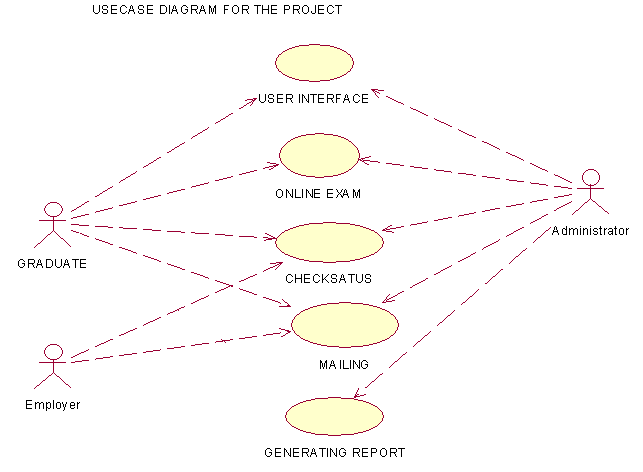
1. It can cause obsolesce to employees.

2. It can resist the introduction of new ideas inside the organization.

**3.4 ANALYSIS OF THE NEW SYSTEM**

The new system, which this work intends to address will be internet based. This is to say that the system will be deployable on a website in the internet for users to access on-line. The following will be the key features of the new system:

*In the present use case diagram we have three actors. The actors are Graduate, Administrator and Employer. The use cases are user interface, online exam, and check status, mailing and generating reports.*

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**3.4.1 On-line Application Form**

The system will be fitted with an on-line application form, of which the users can fill on-line. This will replace the primitive paper application, which has many potential problems. With this form, as applicants enter the site and clicks on the application form link, they can fill out the required information and submit same immediately.

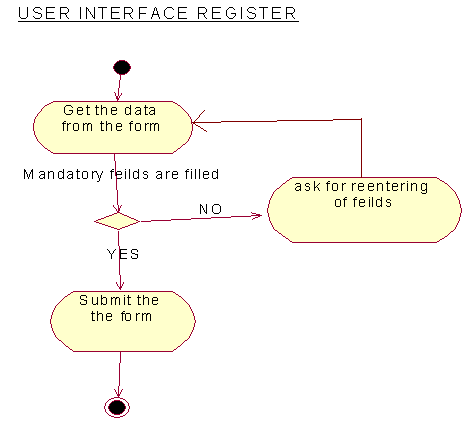


*First the employer has to login into company’s website. Then he has to login in the employer login form. Then he can mount the database and set the query .Validation will be done at the emp login. If it is correct the form will be displayed.*

****

*In the user interface module we have sub modules like register, login, edit profile and apply for jobs. Registering is mandatory for the user. The user can edit his profile by going to edit profile. During registering the graduate would be given a unique id which he has to use as his further proceedings.*

**Activity diagram:**

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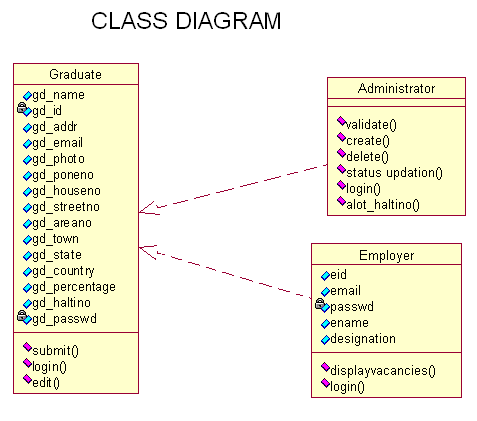
*In the user interface register the user has to give all his mandatory fields then only he will get the form if not he will not be given form. After entering all the details he has to submit his form His entire details will be stored in the database server.*

**3.4.2 Form Validation**

This feature ensures that the form contains the correct required information before they are submitted. This laces the applicant on the situation of ensuring that he/she has supplied the all but necessary information.

**3.4.3 Database**

The new system will be database driven. The database will be implemented with **SQL**, and hosted locally. In other words, the system that hosts the site will be a local server. The database is designed in such a way that form data are bounded to the database for the purpose of form submission. The user may only access the database when they submit forms but cannot retrieve information from the database.



*In the class diagram we have three classes that is the graduate, administrator and the employer.*

**3.4.4 Job Advert Page**

The system will be fitted with link to a page that advertises available job vacancy. The user is requires to access the link to find out any job vacancy that has been posted from the server. As a result of this feature, the server has the ability to upload information to the site whenever such need arises.

**3.4.5 How the Site is Run**

The site when lunched will present users with the home page. This home page allows the user links to other pages. The pages accessible by the users are the application form page and the vacancy page. Other links requires authentication and password, which must be issued by the site operator or administrator.

**3.5 ADVANTAGES AND DISADVANTAGES OF THE NEW SYSTEM**

**3.5.1 Advantages of the new System**

The new system has numerous advantages, which includes the following:

1. On-line access to information is a crucial aspect of this work, which makes it possible for the user to access the content from any remote distance.

2. The system is cost free for users

3. The system is user friendly

4. The system ensures that fraud is eliminated

5. The system maximizes the use of limited spaces.

**3.5.2 Disadvantages of the new System**

1. Users must be computer literate to be able to use it

2. Hosting such a site is capital intensive

3. It takes time to develop such a dynamic system

4. Security is key issue since there is a lot security threats on-line.

**3.6 JUSTIFICATION OF THE NEW SYSTEM**

A system like this, Web Based Recruitment portal, is needful at this time, when information technology has taken over almost every aspect of human activities. In the first instance, we need such a system to stay afloat with the recent technological level with other nations. It is also important because of its easy method of documentation without human interference. Instated of having many staff doing the same thing, only one staff may be required to monitor how the information is flowing in and out.